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#### **PREFACE**

This report presents the results of the 1997 General Aviation and Air Taxi Activity Survey (GAATA) and is prepared by the Statistics and Forecast Branch, Planning Analysis Division, Office of Aviation Policy and Plans (APO-1).

This survey provides information about the activity of the general aviation and air taxi aircraft fleet. It excludes commuters. The information obtained from the survey enables the Federal Aviation Administration to monitor the general aviation and air taxi fleet so that the FAA can, among other activities, anticipate and meet demand for National Airspace System (NAS) facilities and services, assess the impact of regulatory changes on the general aviation and air taxi fleet, and implement measures to ensure the safe operation of all aircraft in the airspace.

Each year the information for the survey is collected using a statistically designed sample survey. The sample is selected from all general aviation and air taxi aircraft registered with the FAA. Appendix A of this report provides a detailed description of the survey, its history, and the survey sample design.

To be more responsive to the needs of the general aviation community, a number of major changes have been incorporated into the survey over the years. Changes made since 1993 are detailed in the Appendix and in previous publications.

The GAATA Survey is currently under both agency and industry review and improvements are being implemented incrementally. The processing and review of the 1997 data resulted in several changes in editing and estimation methods. Summary level estimates for 1995 and 1996 have been revised to reflect these changes. Revisions of more detailed information for these years are not possible due to resource limitations. Data for years prior to 1995 have not been revised, and may not be comparable to the latest available data.

The report is divided into seven chapters and an appendix as follows:

Chapter I, **Historical General Aviation and Air Taxi Activity Measures, 1988-1997**, presents summary information from the 1988 through 1997 surveys. Statistics include general aviation and air taxi population sizes, the number of active aircraft, and total and average hours flown. Other historical measures include active aircraft by aircraft type and by primary use. In addition, Chapter I provides three tables which highlight the 1997 findings. These tables include active general aviation and air taxi aircraft by aircraft type and primary use, active general aviation and air taxi aircraft total hours by aircraft type and primary use, and active general aviation and air taxi aircraft and hours flown by FAA region and state of based aircraft.

Chapter II, Common General Aviation and Air Taxi Activity Measures, presents information on the general aviation and air taxi population size, the number of active aircraft, and total and average hours flown. Statistics on another measurement of activity, number of landings, are also given by total, local flight and cross-country flight

Chapter III, **Primary and Actual Use**, lists number of active aircraft by primary use by type of aircraft and total hours flown by actual use by the general aviation and air taxi fleet. The number of nautical miles flown by actual use are also listed in detail.

Chapter IV, Flying Conditions, presents statistics on the conditions under which the general aviation and air taxi population flies. Detailed statistics on the number of hours flown under Visual Meteorological Conditions (VMC) and Instrument Meteorological Conditions (IMC) during the day and night are given.

Chapter V, Fuel Consumption, gives information on the average and total fuel consumption rates of the general aviation and air taxi fleet.

Chapter VI, Airframe Hours, provides data on the age of the general aviation and air taxi fleet--average airframe hours per active aircraft.

Chapter VII, Landing Gear Systems, presents data on the number and annual hours flown by general aviation aircraft with a fixed or retractable landing gear system by aircraft type, and the number of general aviation aircraft with a fixed or retractable landing gear system by age of aircraft.

Appendix A, Methodology for the 1997 General Aviation and Air Taxi Activity Survey, provides a detailed description of the survey, its history, the survey sample design, and a definition and explanation of "standard error," a statistical measure reported in each table.

Several tables have been withheld from this publication because of concerns about the quality of the estimates. Tabulations by make and model group that have been published in the past are available on request. Estimates of avionics equipment have also been excluded from the survey results and it is uncertain whether those estimates will be developed and published.

Suggestions and comments about this report are welcome and will be given careful consideration in planning future editions. Please direct any comments to Mr. George Stamas, Statistics and Forecast Branch, phone number (202) 267-7924, FAX (202) 267-5370 or e-mail george.stamas@faa.gov.

John M. Rodgers

Director of Aviation Policy and Plans

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